



State of New Jersey

CHRIS CHRISTIE
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code – 401-02B
Division of Water Quality
Bureau of Surface Water Permitting
P.O. Box 420 – 401 E State St
Trenton, NJ 08625-0420
Phone: (609) 292-4860 / Fax: (609) 984-7938

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7008 1140 0000 1424 8738
December 5, 2011

Daryl Harris, Director, Port Reading Refinery
Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095

Re: Final Surface Water Renewal Permit Action
Category: B - Industrial Wastewater
NJPDES Permit No. NJ0028878
Hess Corporation - Port Reading Refinery
Woodbridge Township, Middlesex County

Dear Mr. Harris:

Enclosed is a **final** New Jersey Pollutant Discharge Elimination System (NJPDES) permit action identified above which has been issued in accordance with N.J.A.C. 7:14A. Comments were received on the draft permit issued on October 4, 2011. The thirty (30) day public comment period began on October 14, 2011 when the public notice was published in the *Home News Tribune* and ended on November 12, 2011. This is a major permit renewal action for a petroleum refinery that operates at a current feed rate of 66,500 barrels/day and discharges a long-term average flow of 0.77 million gallons per day of treated industrial wastewater into the Arthur Kill, classified as SE3 waters.

A summary of the significant and relevant comments received on the draft action during the public comment period, the Department's responses, and an explanation of any changes from the draft action have been included in the Response to Comments document attached hereto as per N.J.A.C. 7:14A-15.16.

Any requests for an adjudicatory hearing shall be submitted in writing by certified mail, or by other means which provide verification of the date of delivery to the Department, within 30 days of receipt of this Surface Water Renewal Permit Action in accordance with N.J.A.C. 7:14A-17.2. You may also request a stay of any contested permit condition, which must be justified as per N.J.A.C. 7:14A-17.6 *et seq.* The adjudicatory hearing request must be accompanied by a completed Adjudicatory Hearing Request Form; the stay request must be accompanied by a completed Stay Request Form. Copies of these forms can be downloaded from the Department's website at <http://www.nj.gov/dep/dwq>.

As per N.J.A.C. 7:14A-4.2(e)3, any person planning to continue discharging after the expiration date of an existing NJPDES permit shall file an application for renewal at least 180 calendar days prior to the expiration of the existing permit.

All monitoring shall be conducted in accordance with 1) the Department's "Field Sampling Procedures Manual" applicable at the time of sampling (N.J.A.C. 7:14A-6.5(b)4), and/or 2) the method approved by the Department in Part IV of the permit. The Field Sampling Procedures Manual is available at <http://www.nj.gov/dep/srp/guidance/fspm/>.

As a result of this permit action, your monitoring report forms (MRFs) have been changed and will be mailed to your current MRF recipient. Beginning the effective date of this permit action, please use the new forms. If these revised forms are not received within 2 weeks, please contact the Office of Permit Management at (609) 984-4428 for copies.

For your convenience, a schedule of submittal requirements has been included with this permit package.

Questions or comments regarding the final action should be addressed to Bela Mankad at (609) 292-4860.

Sincerely,

A handwritten signature in black ink, appearing to read "Pilar Patterson", is positioned above the typed name.

Pilar Patterson, Chief
Bureau of Surface Water Permitting

Enclosures

cc: Permit Distribution List

Masterfile #: 14854; PI #: 46052

FACILITY SUBMITTALS

1. GDR - General Discharge Requirements

Task Description	Actual Due Date
Submit a Complete Permit Renewal Application	10/02/2016

2. B - Industrial Wastewater

Task Description	Actual Due Date
Submit an Acute Whole Effluent Toxicity Test Report	10/26/2012
Submit an Acute Whole Effluent Toxicity Test Report	04/26/2013
Submit an Acute Whole Effluent Toxicity Test Report	10/26/2013
Submit an Acute Whole Effluent Toxicity Test Report	04/26/2014
Submit an Acute Whole Effluent Toxicity Test Report	10/26/2014
Submit an Acute Whole Effluent Toxicity Test Report	04/26/2015
Submit an Acute Whole Effluent Toxicity Test Report	10/26/2015
Submit an Acute Whole Effluent Toxicity Test Report	04/26/2016
Submit an Acute Whole Effluent Toxicity Test Report	10/26/2016

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- 2. Facility Submittals**
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- 6. Part I – General Requirements: NJPDES**
- 7. Part II – General Requirements: Discharge Categories**
- 8. Part III – Limits and Monitoring Requirements**
- 9. Part IV – Specific Requirements: Narrative**

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Surface Water Permitting

RESPONSE TO COMMENTS

Comments were received on the NJPDES draft Surface Water Renewal Permit Action No. NJ0028878 issued on October 4, 2011. The thirty (30) day public comment period began on October 14, 2011 when the Public Notice was published in the *Home News Tribune* and it ended on November 12, 2011. The following person commented during the public comment period:

Howard S. Goldman, Environmental Manager, Hess Corporation, in a letter dated November 3, 2011.

A summary of the timely and significant comments received, the New Jersey Department of Environmental Protection's (Department) responses to these comments, and an explanation of any changes from the draft action have been included below:

1. **COMMENT:** **Sample Type for Priority Pollutant Testing; Fact Sheet - Section 6 B.15, Page 14, Part III, Table III-A-2 and 3, Pages 6-15.**

It is requested that the sample type be changed from "24-hour composite" to "composite" for the priority pollutant testing. There are many instances in which the wastewater treatment plant does not operate for a continuous 24 hour period. Therefore, we request that the permit only require "composite" samples to be collected.

RESPONSE:

The Department acknowledges the permittee's concern that the nature of operations at the wastewater treatment plant may not always allow for the collection of samples composited over a 24 hour period. Based on similar comments submitted on the pre draft permit by Eric B. Haas, Process Engineer at the facility, the "24 hour composite" sample type specified for pollutants monitored weekly or monthly that were included on the monthly Discharge Monitoring Report was changed to a "composite" sample type in the draft permit. Therefore, based on the same rationale, the Department agrees that it is also appropriate to change the sample type for those priority pollutants for which a "24 hour composite" sample was specified in the draft permit to a "composite" sample in the Final Permit.

This change is reflected in Part III, Tables III-A-1 and 2, pages 6-15.

2. **COMMENT:** **Approval for the use of Nalco CNQR 3475 as a boiler additive; Part IV, Section E. 1, Page 4 and Fact Sheet, Section 6.I, Page 16.**

Hess has requested authorization to use boiler additive Nalco CNQR 3475. As per information previously provided, the anticipated amount to be used will be less than 5 gallons per day. The chemical will be significantly degraded in the boiler system and fully treated by the wastewater treatment plant. It is anticipated that no detectable concentrations of the chemical will be present in the outfall. It is requested that authorization for use of this additive be added to the list of chemicals currently listed in the draft permit.

There are a number of water treatment chemicals Hess requested authorization to use. These chemicals were listed as approved in the Fact Sheet but were not listed as approved in Part IV, Page 4 of the permit. It is requested that the list of approved chemicals in Part IV, Page 4 be changed to match the list of approved chemicals in the Fact Sheet.

RESPONSE:

The Material Safety Data Sheet (MSDS) for Nalco CNQR 3475 lists two chemical constituents in this product, namely, Diethyl-Hydroxyl-Amine (5-10% by weight) and Hydroquinone (1-5% by weight) as hazardous in nature. Furthermore, Section 3 of the MSDS specifies that the product contains a suspected mutagen. A review of the MSDS for the individual hazardous constituents indicates that Diethyl-Hydroxyl-Amine may be toxic to the reproductive system and may be mutagenic in nature. The Department has also reviewed the information provided in e-mail communication dated August 22, 2011 from Eric B. Haas, Process Engineer at the facility, detailing the proposed usage rate and the nature of one of the hazardous constituents, namely, Hydroquinone. As explained in the e-mail, technical information provided by the chemical vendor indicates that Hydroquinone breaks down in the high temperature environment of the boiler, where the breakdown begins at 350°F and occurs rapidly at 420°F. Since the refinery boilers typically operate at a higher temperature of 480°F, the permittee believes that this hazardous constituent should break down when the chemical enters the boiler, before it even has the chance to enter the wastewater treatment plant. Additionally, the permittee expects that a portion of this chemical would leave with the steam and therefore, not be present to a great extent in the boiler blow down. Finally, the very low dosage rate would result in a minimal concentration of only 0.002 to 0.01 part per million in the effluent at a flow rate of 1 million gallons per day (MGD).

The Department appreciates the details provided by the permittee regarding the breakdown of Hydroquinone, and acknowledges that its intended use may not contribute to effluent toxicity to the extent that would make it unsafe for use. However, the other constituent also of concern is Diethyl-Hydroxyl-Amine, which is present at a higher concentration in this product than Hydroquinone. Since Diethyl-Hydroxyl-Amine is a suspected mutagen, and no information is available at the present time that its intended use will not contribute to effluent toxicity, it is the Department's position that the combination of these two chemicals makes this product unsafe to use. This particular combination of chemicals has been denied previously for use by another facility also, where that facility was able to find a safer replacement.

Therefore, the Department **denies** the request for use of **CNQR 3475** as a boiler treatment additive at the present time. However, in the future, if the permittee provides further information regarding the degradation products and ecotoxicological effects of Diethyl-Hydroxyl-Amine, the Department will be willing to reevaluate the suitability of use of this product for boiler water treatment.

Furthermore, as requested in the second paragraph of this comment, the Department has reviewed the list of approved chemicals in Part IV, Section E.1.f of the permit to ensure that it matches those listed as approved in the Fact Sheet. Based on comments submitted on the pre draft permit by Eric B. Haas, Process Engineer at the facility, the Department updated the list of chemicals approved for use as biocides or cooling water additives in the draft permit. This change was included in both, Section 6.I of the Fact Sheet as well as Part IV, Section E.1.f. Additionally, the Department has also reviewed the permittee's recent request submitted in an e-mail dated November 4, 2011 from Howard Goldman, Environmental Manager at the facility, for the use of two new water treatment chemicals for the boiler system, namely, Nalco 22353 and Eliminox. Based on a review of the information contained in the MSDS for these products, and the proposed usage rates specified in the e-mail, the Department has approved their use as described. As a result, these two chemicals are also included in the list of approved chemicals in Part IV, Section E.1.f of the Final Permit. Since the Fact Sheet is not included in the Final Permit, these chemicals do not appear in the list of approved chemicals in Section 6.I of the Fact Sheet; however, this document serves to incorporate this change into the Administrative Record.

Therefore, please refer to Part IV, Section E.1.f of the Final Permit to review the complete list of approved biocides, cooling water and boiler water additives. As described in this section, the use of any chemicals other than those listed in this section requires Departmental approval.

3. COMMENT: Requirement to perform semi-annual and annual wastewater testing in different quarters every year and the requirement to conduct priority pollutant testing at the same time as Whole Effluent Toxicity; Part IV, Section A.1.g.&h.

It is requested that the requirement to perform annual and semiannual wastewater testing in a different quarter of each year be removed from the permit. The refinery process is constant and unchanging during the year and the quality of the effluent is constant. The permit specifies that priority pollutant testing and whole effluent toxicity testing be performed together when feasible. The requirement to alter quarters for priority pollutant testing makes the performance of semiannual whole effluent toxicity testing very difficult to administer.

RESPONSE:

The two requirements referenced in this comment are standard conditions included in Part IV, Section A.1 of all NJPDES/DSW permits.

The permittee requests that the Department remove the requirement to perform annual and semiannual wastewater testing in a different quarter of each year. This request is based on the permittee's belief that the refinery process is constant and unchanging during the year, therefore, the effluent quality is constant. However, although not very noticeable, in practice, effluent quality and quantity can vary over time in terms of volume and the concentrations of constituents discharged. Variations occur due to a number of factors, including changes in production cycle, variations in response of the wastewater treatment system to influent changes, variations in treatment system performance, and changes in climate. Even in industries that operate continuous processes, variations in the quality of raw materials and activities, such as the use of additives, can result in changes in effluent constituent concentrations. An example of seasonal variations that could affect effluent quality is the increase in effluent temperature experienced during the summer months at the facility. As indicated by Eric B. Haas in comments on the pre-draft permit, the discharge from the facility's wastewater treatment plant is often discontinued in the mornings for weeks at a time in the summer months due to exceedances of the temperature limitation. In accordance with 40 CFR 122.44(d)(1)(ii), effluent variability is factored into the calculations for determining the need for water quality based effluent limits (WQBELs). Therefore, inclusion of the requirement to perform annual and semiannual wastewater testing in a different quarter of each year so that tests are conducted in each of the four permit quarters ensures that seasonal and other variations are accounted for and representative data is collected over the course of the permit cycle to determine the need for WQBELs upon renewal of the permit. As authorized by N.J.A.C. 7:14A-6.2(a), the permittee shall comply with all the conditions of the permit. This shall include providing representative samples and measurements, in accordance with N.J.A.C. 7:14A-6.5(a)1.

The permittee contends that the requirement to alter quarters for priority pollutant testing and to also perform this testing concurrently with whole effluent toxicity testing makes the performance of semiannual whole effluent toxicity testing very difficult to administer. This requirement is based on guidance provided in the current EPA "Technical Support Document for Water Quality-based Toxics Control" (TSD) (EPA- 505/2-90-001) for identifying, analyzing, and controlling adverse water quality impacts caused by toxic discharges to the surface waters of the Nation, which is an important objective of the Clean Water Act (CWA). To effectively accomplish this objective, EPA recommends the use of an integrative strategy, which includes the use of chemical-specific, as well as whole effluent toxicity limitations. It is the Department's position that monitoring for these parameters on an annual and semi-annual basis concurrently with Whole Effluent Toxicity monitoring provides useful information regarding the correlation between the presence or absence of individual toxic pollutants in the effluent and the overall toxicity exhibited by the effluent in the receiving water. Please note that this requirement is meant to serve as guidance only; therefore, this condition also specifies that the concurrent monitoring be conducted, "when feasible". Since the inclusion of the concurrent testing requirement also allows for some flexibility, it is the Department's position that it should not pose an unreasonable burden on the permittee.

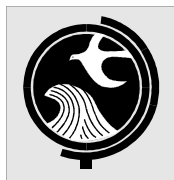
Thus, no change to the permit is necessary as a result of this comment.

4. COMMENT: Permittee Name Change; Headings on all sections of the Permit

It is requested that the word “Amerada” be removed from the headings throughout the permit. The corporation is now operated as the “Hess Corporation”.

RESPONSE:

The Department has incorporated the requested name change for the permittee and the facility in the site master file for the facility in the Department’s New Jersey Environmental Management System (NJEMS) database. Thus, this correction is now reflected in the headings of all sections of the Final Permit.



NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

Permit Number: NJ0028878

Final: Surface Water Renewal Permit Action

Permittee:

Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095

Co-Permittee:

Property Owner:

Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095

Location Of Activity:

Hess Corporation - Port Reading Refinery
750 Cliff Road
Port Reading (Woodbridge), Middlesex County

Authorization Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
B - Industrial Wastewater	12/5/2011	04/01/2012	03/31/2017

By Authority of:
Commissioner's Office

A handwritten signature in black ink, appearing to read "Pilar Patterson".

DEP AUTHORIZATION
Pilar Patterson, Chief
Bureau of Surface Water Permitting
Division of Water Quality

(Terms, conditions and provisions attached hereto)

Division of Water Quality

PART I GENERAL REQUIREMENTS: NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

- a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.
- b. General Conditions
 - Penalties for Violations N.J.A.C. 7:14-8.1 et seq.
 - Incorporation by Reference N.J.A.C. 7:14A-2.3
 - Toxic Pollutants N.J.A.C. 7:14A-6.2(a)4i
 - Duty to Comply N.J.A.C. 7:14A-6.2(a)1 & 4
 - Duty to Mitigate N.J.A.C. 7:14A-6.2(a)5 & 11
 - Inspection and Entry N.J.A.C. 7:14A-2.11(e)
 - Enforcement Action N.J.A.C. 7:14A-2.9
 - Duty to Reapply N.J.A.C. 7:14A-4.2(e)3
 - Signatory Requirements for Applications and Reports N.J.A.C. 7:14A-4.9
 - Effect of Permit/Other Laws N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
 - Severability N.J.A.C. 7:14A-2.2
 - Administrative Continuation of Permits N.J.A.C. 7:14A-2.8
 - Permit Actions N.J.A.C. 7:14A-2.7(c)
 - Reopener Clause N.J.A.C. 7:14A-6.2(a)10
 - Permit Duration and Renewal N.J.A.C. 7:14A-2.7(a) & (b)
 - Consolidation of Permit Process N.J.A.C. 7:14A-15.5
 - Confidentiality N.J.A.C. 7:14A-18.2 & 2.11(g)
 - Fee Schedule N.J.A.C. 7:14A-3.1
 - Treatment Works Approval N.J.A.C. 7:14A-22 & 23
- c. Operation And Maintenance
 - Need to Halt or Reduce not a Defense N.J.A.C. 7:14A-2.9(b)
 - Proper Operation and Maintenance N.J.A.C. 7:14A-6.12
- d. Monitoring And Records
 - Monitoring N.J.A.C. 7:14A-6.5
 - Recordkeeping N.J.A.C. 7:14A-6.6
 - Signatory Requirements for Monitoring Reports N.J.A.C. 7:14A-6.9
- e. Reporting Requirements
 - Planned Changes N.J.A.C. 7:14A-6.7
 - Reporting of Monitoring Results N.J.A.C. 7:14A-6.8
 - Noncompliance Reporting
 - Hotline/Two Hour & Twenty-four Hour Reporting N.J.A.C. 7:14A-6.10 & 6.8(h)
 - Written Reporting N.J.A.C. 7:14A-6.10(c) & (d)
 - Duty to Provide Information N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h)
 - Schedules of Compliance N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
 - Transfer N.J.A.C. 7:14A-6.4
 - N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

- a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations which are in effect as of the effective date of the final permit.
 - i. Surface Water Quality Standards N.J.A.C. 7:9B-1
 - ii. Water Quality Management Planning Regulations N.J.A.C. 7:15

B. General Conditions

1. Scope

- a. The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations and ordinances.

2. Permit Renewal Requirement

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.
- b. Submit a complete permit renewal application: 180 days before the Expiration Date.

3. Notification of Non-Compliance

- a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP HOTLINE at 1-877-WARNDEP (1-877-927-6337).
- b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five days.

4. Notification of Changes

- a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.
- b. Prior to any change in ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to the notification of change in ownership.

5. Access to Information

- a. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter upon a person's premises, for purposes of inspection, and to access / copy any records that must be kept under the conditions of this permit.

6. Operator Certification

- a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.
 - i. Notifications shall be submitted to:
NJDEP
Examination and Licensing Unit
P.O. Box 417
Trenton, New Jersey 08625
(609)777-1012.
- b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

7. Operation Restrictions

- a. The operation of a waste treatment or disposal facility shall at no time create: (a) a discharge, except as authorized by the Department in the manner and location specified in Part III of this permit; (b) any discharge to the waters of the state or any standing or ponded condition for water or waste, except as specifically authorized by a valid NJPDES permit.

8. Residuals Management

- a. The permittee shall comply with land-based sludge management criteria and shall conform with the requirements for the management of residuals and grit and screenings under N.J.A.C. 7:14A-6.15(a), which includes:
 - i. Standards for the Use or Disposal of Residual, N.J.A.C. 7:14A-20;
 - ii. Section 405 of the Federal Act governing the disposal of sludge from treatment works treating domestic sewage;
 - iii. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Solid Waste Management Rules, N.J.A.C. 7:26;
 - iv. The Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;
 - v. The Statewide Sludge Management Plan promulgated pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; and
 - vi. The provisions concerning disposal of sewage sludge and septage in sanitary landfills set forth at N.J.S.A. 13:1E-42 and the Statewide Sludge Management Plan.
 - vii. Residual that is disposed in a municipal solid waste landfill unit shall meet the requirements in 40 CFR Part 258 and/or N.J.A.C. 7:26 concerning the quality of residual disposed in a municipal solid waste landfill unit. (That is, passes the Toxicity Characteristic Leaching Procedure and does not contain "free liquids" as defined at N.J.A.C. 7:14A-1.2.)

- b. If any applicable standard for residual use or disposal is promulgated under section 405(d) of the Federal Act and Sections 4 and 6 of the State Act and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Department may modify or revoke and reissue the permit to conform to the standard for residual use or disposal.
- c. The permittee shall make provisions for storage, or some other approved alternative management strategy, for anticipated downtimes at a primary residual management alternative. The permittee shall not be permitted to store residual beyond the capacity of the structural treatment and storage components of the treatment works. N.J.A.C. 7:14A-20.8(a) and N.J.A.C. 7:26 provide for the temporary storage of residuals for periods not exceeding six months, provided such storage does not cause pollutants to enter surface or ground waters of the State. The storage of residual for more than six months is not authorized under this permit. However, this prohibition does not apply to residual that remains on the land for longer than six months when the person who prepares the residual demonstrates that the land on which the residual remains is not a surface disposal site or landfill. The demonstration shall explain why residual must remain on the land for longer than six months prior to final use or disposal, discuss the approximate time period during which the residual shall be used or disposed and provide documentation of ultimate residual management arrangements. Said demonstration shall be in writing, be kept on file by the person who prepares residual, and submitted to the Department upon request.
- d. The permittee shall comply with the appropriate adopted District Solid Waste or Sludge Management Plan (which by definition in N.J.A.C. 7:14A-1.2 includes Generator Sludge Management Plans), unless otherwise specifically exempted by the Department.
- e. The preparer must notify and provide information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements to the person who applies bulk residual to the land. This shall include, but not be limited to, the applicable recordkeeping requirements and certification statements of 40 CFR 503.17 as referenced at N.J.A.C. 7:14A-20.7(j).
- f. The preparer who provides biosolids to another person who further prepares the biosolids for application to the land must provide this person with notification and information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements.
- g. Any person who prepares bulk residual in New Jersey that is applied to land in a State other than New Jersey shall comply with the requirement at N.J.A.C. 7:14A-20.7(b)1.ix to submit to the Department written proof of compliance with or satisfaction of all applicable statutes, regulations, and guidelines of the state in which land application will occur.

PART III

LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:

001C Process Outfall

RECEIVING STREAM:

Arthur Kill

STREAM CLASSIFICATION:

SE3(C2)

DISCHARGE CATEGORY(IES):

B - Industrial Wastewater

Location Description

Effluent sampling for all parameters shall be at the last sampling port after final treatment at DSN001C, which discharges into the Arthur Kill at Lat. 40d 33' 27.1" and Long. 74d 14' 32.8".

The sample point "Precipitation" refers to stormwater routed through the treatment plant. Effluent Net Value for parameters with stormwater allocation is calculated by subtracting the stormwater loading (Precipitation) from the measured effluent loading (Effluent Gross Value).

Contributing Waste Types

Cooling tower blowdown, Groundwater Remediation, Petro Ref ELG process H2O, Storm Water Runoff

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Please refer to Part IV, Section G.2 for the calculation of net values for pollutants with stormwater allocation.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Duration Of Discharge	Precipitation	REPORT Monthly Total	*****	DAYS/MON	*****	*****	*****	*****	1/Month	Calculated
January thru December	QL	***	***		***	***	***			
Flow, In Conduit or Thru Treatment Plant	Precipitation	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	1/Month	Calculated
January thru December	QL	***	***		***	***	***			
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Precipitation	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	*****	*****	*****	2/Month	Calculated
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Please refer to Part IV, Section G.2 for the calculation of net values for pollutants with stormwater allocation.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
BOD, 5-Day (20 oC)	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	30 Monthly Average	50 Daily Maximum	MG/L	2/Month	Composite
January thru December	QL	***	***		***	***	***			
BOD, 5-Day (20 oC)	Effluent Net Value	187 Monthly Average	338 Daily Maximum	KG/DAY	*****	*****	*****	*****	2/Month	Calculated
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Precipitation	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Calculated
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	30 Monthly Average	50 Daily Maximum	MG/L	1/Week	Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Net Value	151 Monthly Average	234 Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Calculated
January thru December	QL	***	***		***	***	***			
Oil & Grease Tot Rec Hexane Extraction	Precipitation	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Calculated
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Please refer to Part IV, Section G.2 for the calculation of net values for pollutants with stormwater allocation.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Oil & Grease Tot Rec Hexane Extraction	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	10 Monthly Average	15 Daily Maximum	MG/L	1/Week	Grab
January thru December	QL	***	***		***	***	***			
Oil & Grease Tot Rec Hexane Extraction	Effluent Net Value	54 Monthly Average	101 Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Calculated
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	102 Monthly Average	225 Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Composite
January thru December	QL	***	***		***	***	***			
LC50 Statre 96hr Acu Mysid Bahia	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	*****	*****	%EFFL	1/6 Months	Composite
January thru December	AL	***	***		50	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	35 Daily Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Carbon, Tot Organic (TOC)	Precipitation	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Calculated
January thru December	QL	***	***		***	***	***			
Carbon, Tot Organic (TOC)	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	66 Monthly Average	110 Daily Maximum	MG/L	1/Week	Composite
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Please refer to Part IV, Section G.2 for the calculation of net values for pollutants with stormwater allocation.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Carbon, Tot Organic (TOC)	Effluent Net Value	411 Monthly Average	743 Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Calculated
January thru December	QL	***	***		***	***	***			
Sulfide, Total (as S)	Effluent Gross Value	0.98 Monthly Average	2.16 Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Composite
January thru December	QL	***	***		***	***	***			
Phenolics, Total Recoverable	Precipitation	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Calculated
January thru December	QL	***	***		***	***	***			
Phenolics, Total Recoverable	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Composite
January thru December	QL	***	***		***	***	***			
Phenolics, Total Recoverable	Effluent Net Value	1.2 Monthly Average	2.52 Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Week	Calculated
January thru December	QL	***	***		***	***	***			
Chromium, Hexavalent (as Cr)	Precipitation	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Month	Calculated
January thru December	QL	***	***		***	***	***			
Chromium, Hexavalent (as Cr)	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Composite
January thru December	RQL	***	***		***	10	10			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Please refer to Part IV, Section G.2 for the calculation of net values for pollutants with stormwater allocation.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Chromium, Hexavalent (as Cr)	Effluent Net Value	0.14 Monthly Average	0.32 Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Calculated
January thru December	RQL	***	***		***	10	10			
Chromium, Total (as Cr)	Precipitation	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	*****	*****	*****	1/Month	Calculated
January thru December	QL	***	***		***	***	***			
Chromium, Total (as Cr)	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Composite
January thru December	RQL	***	***		***	10	10			
Chromium, Total (as Cr)	Effluent Net Value	1.71 Monthly Average	4.93 Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Calculated
January thru December	RQL	***	***		***	10	10			
Nickel, Total Recoverable	Effluent Gross Value	2.3 Monthly Average	6.4 Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/Month	Composite
January thru December	RQL	***	***		***	10	10			

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Manganese, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Cyanide, Total (as CN)	Effluent Gross Value	REPORT RQL = 40	UG/L	Grab	January thru December
Arsenic, Total Recoverable (as As)	Effluent Gross Value	REPORT RQL = 8	UG/L	Composite	January thru December
Selenium, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Thallium, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Beryllium, Total Recoverable (as Be)	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Silver, Total Recoverable	Effluent Gross Value	REPORT RQL = 2	UG/L	Composite	January thru December
Cadmium, Total Recoverable	Effluent Gross Value	REPORT RQL = 4	UG/L	Composite	January thru December
Lead, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Copper, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Antimony, Total Recoverable	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Mercury Total Recoverable	Effluent Gross Value	REPORT RQL = 1	UG/L	Composite	January thru December
Acenaphthylene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Acenaphthene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	Composite	January thru December
Anthracene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Benzo(b)fluoranthene (3,4-benzo)	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Benzo(k)fluoranthene	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Benzo(a)pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Bis(2-chloroethyl) ether	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Bis(2-chloroethoxy) methane	Effluent Gross Value	REPORT RQL = 26.5	UG/L	Composite	January thru December
Bis (2-chloroiso- propyl) ether	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Butyl benzyl phthalate	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Chrysene	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Diethyl phthalate	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Dimethyl phthalate	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
1,2-Diphenyl- hydrazine	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Fluoranthene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Fluorene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Hexachlorocyclo- pentadiene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Hexachloroethane	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Indeno(1,2,3-cd)-pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Isophorone	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
N-nitrosodi-n-propylamine	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
N-nitrosodiphenyl-amine	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
N-nitrosodimethyl-amine	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Nitrobenzene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Phenanthrene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Benzo(ghi)perylene	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Benzo(a)anthracene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
1,2-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
1,2,4-Trichloro-benzene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Dibenzo(a,h)anthracene	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
1,3-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
1,4-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
2-Chloronaphthalene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	Composite	January thru December
Di-n-octyl Phthalate	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
2,4-Dinitrotoluene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
2,6-Dinitrotoluene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	Composite	January thru December
3,3'-Dichloro-benzidine	Effluent Gross Value	REPORT RQL = 60	UG/L	Composite	January thru December
4-Bromophenyl phenyl ether	Effluent Gross Value	REPORT RQL = 9.5	UG/L	Composite	January thru December
Naphthalene	Effluent Gross Value	REPORT RQL = 8	UG/L	Composite	January thru December
Bis(2-ethylhexyl) phthalate	Effluent Gross Value	REPORT RQL = 30	UG/L	Composite	January thru December
Di-n-butyl phthalate	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
Benzidine	Effluent Gross Value	REPORT RQL = 50	UG/L	Composite	January thru December
Malathion	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Demeton	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Hexachlorobenzene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Hexachlorobutadiene	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Mirex	Effluent Gross Value	REPORT	UG/L	Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,3-Dichloropropene	Effluent Gross Value	REPORT RQL = 7	UG/L	Grab	January thru December
1,2,4,5-Tetrachloro-benzene	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
N-nitrosodiethyl-amine	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
N-nitrosopyrrolidine	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Carbon Tetrachloride	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,2-Dichloroethane	Effluent Gross Value	REPORT RQL = 3	UG/L	Grab	January thru December
Bromoform	Effluent Gross Value	REPORT RQL = 8	UG/L	Grab	January thru December
Chloroform	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Acrolein	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December
Acrylonitrile	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December
Chlorobenzene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Chlorodibromomethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Methyl Bromide	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
Methyl Chloride	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Methylene Chloride	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Tetrachloroethylene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
Trichlorofluoro-methane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
1,1-Dichloroethane	Effluent Gross Value	REPORT RQL = 23.5	UG/L	Grab	January thru December
1,1-Dichloroethylene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,1-Trichloro-ethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2-Trichloro-ethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2,2-Tetrachloro-ethane	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
1,2-Dichloropropane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
1,2-trans-Dichloro-ethylene	Effluent Gross Value	REPORT RQL = 4	UG/L	Grab	January thru December
2-Chloroethyl Vinyl Ether (Mixed)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromodichloromethane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Vinyl Chloride	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Trichloroethylene	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Methoxychlor	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
N-Nitrosodi-n-butylamine	Effluent Gross Value	REPORT	UG/L	Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Chloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Parachloro-m-cresol	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Parathion	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Phenols	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4,5-Trichloro-phenol	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Delta BHC, Total (ug/l)	Effluent Gross Value	REPORT RQL = 0.02	UG/L	Composite	January thru December
Endosulfan Sulfate	Effluent Gross Value	REPORT RQL = 0.08	UG/L	Composite	January thru December
Beta Endosulfan	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Composite	January thru December
Alpha Endosulfan	Effluent Gross Value	REPORT RQL = 0.02	UG/L	Composite	January thru December
Endrin Aldehyde	Effluent Gross Value	REPORT RQL = 0.1	UG/L	Composite	January thru December
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
4,4'-DDT(p,p'-DDT)	Effluent Gross Value	REPORT RQL = 0.06	UG/L	Composite	January thru December
4,4'-DDD(p,p'-DDD)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Composite	January thru December
4,4'-DDE(p,p'-DDE)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Composite	January thru December
Aldrin	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Alpha BHC	Effluent Gross Value	REPORT RQL = 0.02	UG/L	Composite	January thru December
Beta BHC	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Composite	January thru December
Gamma BHC (lindane),	Effluent Gross Value	REPORT RQL = 0.03	UG/L	Composite	January thru December
Chlordane	Effluent Gross Value	REPORT RQL = 0.2	UG/L	Composite	January thru December
Dieldrin	Effluent Gross Value	REPORT RQL = 0.03	UG/L	Composite	January thru December
Endosulfans, Total (alpha and beta)	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Endrin	Effluent Gross Value	REPORT RQL = 0.04	UG/L	Composite	January thru December
Toxaphene	Effluent Gross Value	REPORT RQL = 1	UG/L	Composite	January thru December
Heptachlor	Effluent Gross Value	REPORT RQL = 0.02	UG/L	Composite	January thru December
Heptachlor Epoxide	Effluent Gross Value	REPORT RQL = 0.4	UG/L	Composite	January thru December
Chlorpyrifos	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
2-Chlorophenol	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
2-Nitrophenol	Effluent Gross Value	REPORT RQL = 18	UG/L	Composite	January thru December
2,4-Dichlorophenol	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
2,4-Dimethylphenol	Effluent Gross Value	REPORT RQL = 13.5	UG/L	Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
2,4-Dinitrophenol	Effluent Gross Value	REPORT RQL = 40	UG/L	Composite	January thru December
2,4,6-Trichloro-phenol	Effluent Gross Value	REPORT RQL = 20	UG/L	Composite	January thru December
4-Chlorophenyl phenyl ether	Effluent Gross Value	REPORT RQL = 21	UG/L	Composite	January thru December
4-Nitrophenol	Effluent Gross Value	REPORT RQL = 12	UG/L	Composite	January thru December
4,6-Dinitro-o-cresol	Effluent Gross Value	REPORT RQL = 60	UG/L	Composite	January thru December
Phenol Single Compound	Effluent Gross Value	REPORT RQL = 10	UG/L	Composite	January thru December
Pentachlorophenol	Effluent Gross Value	REPORT RQL = 30	UG/L	Composite	January thru December
Pentachlorobenzene	Effluent Gross Value	REPORT	UG/L	Composite	January thru December
Guthion	Effluent Gross Value	REPORT	UG/L	Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 3: Surface Water WCR - Semi Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Zinc, Total Recoverable	Effluent Gross Value	REPORT RQL = 30	UG/L	Composite	January thru December
Methyl tert-butyl Ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Toluene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Benzene	Effluent Gross Value	REPORT RQL = 7	UG/L	Grab	January thru December
Ethylbenzene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Xylenes (Total)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Tertiary Butyl Alcohol (TBA)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

MONITORED LOCATION:
SI6A Sludge Dewatering Tanks

DISCHARGE CATEGORY(IES):
B - Industrial Wastewater

Location Description

Annually, a representative sample of the thickened sludge removed for use or disposal shall be obtained and analyzed pursuant to the Sludge Quality Assurance Regulations (SQAR, N.J.A.C. 7:14C).

Contributing Waste Types

Ind Residual-Other

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 04/01/2012 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Nitrate Nitrogen, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Nitrogen, Kjeldahl Total, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Sulfide, Total (as S)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Magnesium Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Barium, Total (as Ba)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Boron, Total (as B)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Manganese, Total (as Mn)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Vanadium, Total (as V)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Titanium, Total (as Ti)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Molybdenum Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Phosphorus Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Arsenic, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Cobalt, Total (as Co)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Silver, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Antimony, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Aluminum, Total (as Al)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Selenium, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Thallium, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Copper, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Beryllium Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Cadmium, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Zinc, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Lead, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Nickel, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Mercury, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Chromium, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Iron, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Acenaphthylene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Acenaphthene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Anthracene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Benzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Benzo(k)fluoranthene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Benzo(a)pyrene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Bis(2-chloroethyl) ether, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Bis(2-chloroethoxy)- methane, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Bis(2-chloroiso- propyl)-ether, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Butyl benzyl- phthalate, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Chrysene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Diethyl phthalate, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Dimethyl phthalate, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2-Diphenyl- hydrazine, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Fluoranthene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Fluorene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Hexachlorocyclo- pentadiene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Hexachloroethane, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Indeno(1,2,3-cd)-pyrene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
N-nitrosodi-n-propylamine, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
N-nitrosodi-phenylamine, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Naphthalene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Nitrobenzene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Phenanthrene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Pyrene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Benzo(ghi)perylene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Benzo(a)anthracene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2-Dichlorobenzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2,4-Trichloro- benzene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Dibenzo(a,h) anthracene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,3-Dichlorobenzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,4-Dichlorobenzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
2-Chloronaphthalene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Di-n-octyl Phthalate Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
2,4-Dinitrotoluene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
2,6-Dinitrotoluene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
3,3'-Dichloro- benzidine, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
4-Bromophenyl phenyl ether, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Bis(2-ethylhexyl) phthalate, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Di-n-butyl phthalate Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Benzidine Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Hexachlorobenzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Hexachlorobutadiene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
trans-1,3-Dichloro- propene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
3,4 Benzo- fluoranthene	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Methyl tert-butyl Ether	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Acrolein, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Acrylonitrile Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Bromoform Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Carbon Tetrachloride Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Chlorobenzene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Chlorodibromomethane Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Chloroethane Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Chloroform Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Dichlorobromomethane Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Ethylbenzene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Methyl Bromide, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Methyl Chloride, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Methylene Chloride, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Tetrachloroethylene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Toluene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Trichloroethylene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Vinyl Chloride Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,1-Dichloroethane, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,1-Dichloroethylene Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,1,1-Trichloro- ethane, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,1,2-Trichloro- ethane, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
1,1,2,2-Tetrachloroethane	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2-Dichloroethane, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2-Dichloropropane, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
1,2-trans-Dichloro ethylene, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
2-Chloroethyl Vinyl Ether, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Xylene, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Tertiary Butyl Alcohol (TBA)	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals DMR Reporting Requirements:

Submit an Annual DMR: due 60 calendar days after the end of each calendar year.

Table III - B - 1: Residuals DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Cyanide, Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Isophorone Dry Weight	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
Phenol, Single Compound, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			
4-Chlorophenyl pheny lether, Dry Wt	Industrial Residuals	*****	*****	*****	*****	REPORT Monthly Average	*****	MG/KG	1/Year	Composite
January thru December	QL	***	***		***	***	***			

Residuals WCR - Annual Reporting Requirements:

Submit an Annual WCR: due 60 calendar days after the end of each calendar year.

Table III - B - 3: Residuals WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:** 04/01/2012**PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Amt Sludge Rmvd, Wet Cubic Yards	Industrial Residuals	REPORT	WCY/YR	Calculated	January thru December
Amt Sludge Rmvd, Wet Metric Tons	Industrial Residuals	REPORT	WMT/YR	Calculated	January thru December
Amt Sludge Rmvd, Gallons	Industrial Residuals	REPORT	GAL/YEAR	Calculated	January thru December
Total Amount of Sludge Removed	Industrial Residuals	REPORT	DMT/YR	Calculated	January thru December
Solids, Total	Industrial Residuals	REPORT	%TS	Composite	January thru December

Residuals Transfer Reporting Requirements:

Submit an Annual RTR: due 60 calendar days after the end of each calendar year.

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Industrial Wastewater

A. MONITORING REQUIREMENTS

1. Standard Monitoring Requirements

- a. Each analysis required by this permit shall be performed by a New Jersey Certified Laboratory that is certified to perform that analysis.
- b. The Permittee shall perform all water/wastewater analyses in accordance with the analytical test procedures specified in 40 CFR 136 unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.
- c. The permittee shall utilize analytical methods that will ensure compliance with the Quantification Levels (QLs) listed in PART III. QLs include, but are not limited to, Recommended Quantification Levels (RQLs) and Method Detection Levels (MDLs). If the permittee and/or contract laboratory determines that the QLs achieved for any pollutant(s) generally will not be as sensitive as the QLs specified in PART III, the permittee must submit a justification of such to the Bureau of Surface Water Permitting. For limited parameters with no QL specified, the sample analysis shall use a detection level at least as sensitive as the effluent limit.
- d. All sampling shall be conducted in accordance with the Department's Field Sampling Procedures Manual, or an alternate method approved by the Department in writing.
- e. All monitoring shall be conducted as specified in Part III.
- f. All sample frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported on the Monitoring Report Forms.
- g. Annual and semi-annual wastewater testing shall be conducted in a different quarter of each year so that tests are conducted in each of the four permit quarters of the permit cycle. Testing may be conducted during any month of the permit quarters.
- h. Monitoring for Wastewater Characterization Report parameters shall be conducted concurrently with the Whole Effluent Toxicity (WET) monitoring, when feasible.
- i. The permittee shall perform all residual analyses in accordance with the analytical test procedures specified in 40 CFR 503.8 and the Sludge Quality Assurance Regulations (N.J.A.C. 7:14C) unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.
- j. Effluent flow shall be measured using a flow meter. Additionally, for the purposes of calculating stormwater credit provided by the ELGs at 40 CFR 419 for certain pollutants in contaminated stormwater treated at the wastewater treatment plant, stormwater flow shall be measured on days that treatment for this flow coincides with sampling for a pollutant with stormwater credit. This procedure is further explained in Section G.2.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

- a. The permittee shall retain records of all monitoring information, including 1) all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable), 2) copies of all reports required by this NJPDES permit, 3) all data used to complete the application for a NJPDES permit, and 4) monitoring information required by the permit related to the permittee's residual use and/or disposal practices, for a period of at least 5 years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application or record.
- b. Records of monitoring information shall include 1) the date, locations, and time of sampling or measurements, 2) the individual(s) who performed the sampling or measurements, 3) the date(s) the analyses were performed, 4) the individual(s) who performed the analyses, 5) the analytical techniques or methods used, and 6) the results of such analyses.

C. REPORTING**1. Standard Reporting Requirements**

- a. The permittee shall submit all required monitoring results to the Department on the forms provided to them. The Monitoring Report Forms (MRFs) may be provided to the permittee in either a paper format or in an electronic file format. Unless otherwise noted, all requirements below pertain to both paper and electronic formats.
- b. Any MRFs in paper format shall be submitted to the following addresses:
 - i. New Jersey Department of Environment Protection
Mail Code 401-02B
Division of Water Quality
Office of Permit Management
P.O. Box 420
Trenton, New Jersey 08625-0420.
 - ii. (if requested by the Water Compliance and Enforcement Bureau)
NJDEP: Central Bureau of Water Compliance and Enforcement
Mail Code 44-03
P.O. Box 420
Trenton, New Jersey 08625-0420.
- c. Any electronic data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee. Paper copies must be available for on-site inspection by DEP personnel or provided to the DEP upon written request.
- d. All monitoring report forms shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.
- e. The highest ranking official may delegate responsibility to certify the monitoring report forms in his or her absence. Authorizations for other individuals to sign shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- f. Monitoring results shall be submitted in accordance with the current Discharge Monitoring Report Manual and any updates thereof.
- g. If monitoring for a parameter is not required in a monitoring period, the permittee must report "CODE=N" for that parameter.

D. SUBMITTALS

1. Standard Submittal Requirements

- a. The permittee shall amend the Operation & Maintenance Manual whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures.

2. Polychlorinated Biphenyls (PCB) Monitoring

- a. The permittee has completed sampling for PCBs as required in a previous permit action. The Department is currently reviewing the sampling data for this and other facilities to determine which facilities are discharging at more elevated levels. Once the Department completes this review and if the permittee's effluent is discharging PCBs at more elevated levels, the Department will require the permittee to develop and submit a PMP for approval within 12 months from the effective date of the permit action the requirement is incorporated in.

3. PCB Pollutant Minimization Plan (PMP) Requirements

- a. If, based on the review of the Final Report, the Department determines that a PMP is required, the permittee shall prepare and submit a PMP to the Department by the date specified in the Department's determination letter.
- b. The permittee shall implement the PMP within 30 days after written notification by the Department that the PMP is complete.
- c. The PMP shall be developed to achieve maximum practical reduction in accordance with the PMP Technical Manual.

4. PCB PMP Annual Report Requirement

- a. The permittee shall submit an annual report in accordance with the Annual Report Guidance Document every 12 months from the implementation of the PMP.
- b. Any revisions to the PMP as a result of the ongoing work shall be reported in the annual report.
- c. The annual report shall contain, at a minimum, a detailed discussion of the specific progress and actions taken by the permittee during the previous twelve month period that addresses PCB loadings and implementation of the PMP.

E. FACILITY MANAGEMENT

1. Discharge Requirements

- a. The permittee shall discharge at the location(s) specified in PART III of this permit.
- b. The permittee shall not discharge foam or cause foaming of the receiving water that: 1) Forms objectionable deposits on the receiving water, 2) Forms floating masses producing a nuisance, or 3) Interferes with a designated use of the waterbody.
- c. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.
- d. The discharge shall not exhibit a visible sheen.
- e. When quantification levels (QL) and effluent limits are both specified for a given parameter in Part III, and the QL is less stringent than the effluent limit, effluent compliance will be determined by comparing the reported value against the QL.

- f. The Permittee is authorized to use the following corrosion inhibitors, biocides, or other cooling water additives: Sulfuric Acid, Nalco3DT191, Nalco3DT199, Nalco3DT192, Nalco3DT184, StabrexST70, Nalco7330, Optimizer7128, Nalco8365, Nalco23101, Nalco7384, Nalco7308, Sodium Hypochlorite, Inhibited Hydrochloric Acid, Soda Ash, Nalco73282, Nalco73286, Nalco73281, Nalco73199, Nalco73550, Nalprep2578, Nalprep8349, EC9078A, Nalco Core Shell 71301, Nalco Core Shell 71303, Nalco3DT197, Caustic, Nalco2584, T1826, Nalco1720, Hydrogen Peroxide, Nalco22310, Nalco7290E, Nalco22353, and Eliminox.

The use of any new additives other than the ones listed above requires Departmental approval. A request for the use of new additives shall be in the form of an advanced notification consisting of all relevant information, including the Material Safety Data Sheets, the nature of the active constituents, and aquatic toxicity data. The Department shall process the request for approval to use the new additives in an expeditious manner and follow up with a written response. If the new additives are chemically similar in nature, the permittee shall only be required to notify the Bureau of Surface Water Permitting prior to their use. However, if the new additives are chemically different in nature, the permittee shall notify this Bureau at least 180 days prior to use so that the permit may be reopened to incorporate any additional limitations and/or monitoring requirements deemed necessary.

2. Interstate Environmental Commission

- a. The permittee shall comply with the Interstate Environmental Commission's (IEC) "Water Quality Regulations." Although no monitoring requirements specific to the IEC are included in this permit, compliance may be determined by the IEC based on its own sampling events. IEC effluent requirements shall not be considered effluent limitations for the purpose of mandatory penalties under N.J.S.A. 58:10A-10.1.

3. Applicability of Discharge Limitations and Effective Dates

- a. Surface Water Discharge Monitoring Report (DMR) Form Requirements
- i. The final effluent limitations and monitoring conditions contained in PART III for DSN 001C apply for the full term of this permit action.
- b. Wastewater Characterization Report (WCR) Form Requirements
- i. The final effluent monitoring conditions contained in PART III for DSN 001C apply for the full term of this permit action.

4. Operation, Maintenance and Emergency conditions

- a. The permittee shall operate and maintain treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit as specified in the Operation & Maintenance Manual.
- b. The permittee shall develop emergency procedures to ensure effective operation of the treatment works under emergency conditions in accordance with NJAC 7:14A-6.12(d).

5. Toxicity Testing Requirements - Acute Whole Effluent Toxicity

- a. Part III of this permit contains an Action Level (AL) for Acute Whole Effluent Toxicity. Toxicity Reduction and Implementation Requirements (TRIR) may be triggered based on exceedences of this AL. See TRIR section below for more details.

- b. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.
- c. Acute toxicity tests shall be conducted using the test species and method identified in Part III of this permit.
- d. Any test that does not meet the specifications of N.J.A.C. 7:18, laboratory certification regulations, must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.
- e. The permittee shall collect and analyze the concentration of ammonia-N in the effluent on the day a sample is collected for WET testing. This result is to be reported on the Biomonitoring Report Form.
- f. The permittee shall resubmit an Acute Methodology Questionnaire within 60 days of any change in laboratory.
- g. Submit an acute whole effluent toxicity test report: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). The permittee shall submit toxicity test results on appropriate forms.
- h. Test reports shall be submitted to:
 - i. New Jersey Department of Environmental Protection
Mail Code 401-02B
Division of Water Quality
Bureau of Surface Water Permitting
P.O. Box 420
Trenton, New Jersey 08625-0420.

6. Toxicity Reduction Implementation Requirements (TRIR)

- a. The permittee shall initiate a tiered toxicity investigation if two out of six consecutive WET tests demonstrate that the effluent does not comply or will not comply with the action level specified in Part III of this permit.
 - i. If the exceedence of the action level is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, the toxicity test data collected during the event may be eliminated when determining the need for initiating a TRIR upon written Department approval.
- b. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the action level in Part III. The monitoring frequency for toxicity testing shall be increased to monthly. Up to 12 additional tests may be required.
 - i. The permittee may return to the toxicity testing frequency specified in Part III if four consecutive toxicity tests conducted during the Toxicity Characterization do not exceed the action level.
 - ii. If two out of any six consecutive, acceptable tests again exceed the action level in Part III, the permittee shall repeat the TRIR.
- c. The permittee shall initiate a Preliminary Toxicity Identification (PTI) upon the third exceedence of the action level specified in Part III during toxicity characterization.

- i. The permittee may return to the monitoring frequency specified in PART III while conducting the PTI. If more frequent WET testing is performed during the PTI, the permittee shall submit all biomonitoring reports to the DEP and report the results for the most sensitive species on the DMR.
 - ii. As appropriate, the PTI shall include:
 - (1) treatment plant performance evaluation,
 - (2) pretreatment program information,
 - (3) evaluation of ammonia and chlorine produced oxidants levels and their effect on the toxicity of the discharge,
 - (4) evaluation of chemical use and processes at the facility, and
 - (5) an evaluation of incidental facility procedures such as floor washing, and chemical spill disposal which may contribute to effluent toxicity.
 - iii. If the permittee demonstrates that the cause of toxicity is the chlorine added for disinfection or the ammonia concentration in the effluent and the chlorine and/or ammonia concentrations are below the established water quality based effluent limitation for chlorine and/or ammonia, the permittee shall identify the procedures to be used in future toxicity tests to account for chlorine and/or ammonia toxicity in their preliminary toxicity identification report.
 - iv. The permittee shall submit a PTI Notification within 15 months of triggering TRIR. This notification shall include a determination that the permittee intends to demonstrate compliance OR plans to initiate a Comprehensive Toxicity Investigation (CTI).
- d. The permittee must demonstrate compliance with the action level in four consecutive WET tests to satisfy the TRIR. After successful completion, the permittee may return to the WET monitoring frequency specified in PART III.
- e. The permittee shall initiate a CTI if the PTI does not identify the cause of toxicity and a demonstration of consistent compliance with the action level in Part III can not be made.
- i. The permittee shall develop a project study plan identifying the party or parties responsible for conducting the comprehensive evaluation, establish a schedule for completing the study, and a description of the technical approach to be utilized.
 - ii. If the permittee determines that the PTI has failed to demonstrate consistent compliance with the action level in Part III, a CTI Workplan must be prepared and submitted within 90 days.
 - iii. The permittee shall summarize the data collected and the actions taken in CTI Quarterly Reports. The reports shall be submitted within 30 calendar days after the end of each quarter.
 - iv. The permittee shall submit a Final CTI Report 90 calendar days after the last quarterly report. The final CTI report shall include the corrective actions identified to reduce toxicity and a schedule for implementing these corrective actions.
- f. Upon receipt of written approval from the Department of the corrective action schedule, the permittee shall implement those corrective actions consistent with that schedule.
- i. The permittee shall satisfy the requirements of the TRIR and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the action level in Part III in four consecutive toxicity tests.
 - ii. If the implemented corrective measures do not result in consistent compliance with the action level in Part III, the permittee shall submit a plan for resuming the CTI.

F. CONDITIONS FOR MODIFICATION

1. Notification requirements

- a. The permittee may request a minor modification for a reduction in monitoring frequency for a non-limited parameter when four consecutive test results of "not detected" have occurred using the specified QL.

2. Causes for modification

- a. The Department may modify or revoke and reissue any permit to incorporate 1) any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity and chemical specific toxic parameters, 2) toxicity reduction requirements, or 3) the implementation of a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7.
- b. The permittee may request a minor modification to eliminate the monitoring requirements associated with a discharge authorized by this permit when the discharge ceases due to changes at the facility.

G. Custom Requirement**1. Wastewater From Other Facilities**

- a. The treatment plant also receives petroleum-contaminated water from petroleum refining, storage, and distribution activities from other Hess and/or non-Hess owned facilities as well as water from petroleum contaminated groundwater remediation sites.

2. Calculations for Treated Stormwater Credit

- a. The ELGs at 40 CFR 419 provide credit for the pollutants BOD5, TSS, Oil and Grease, Total Recoverable Phenolics, Total Chromium, Hexavalent Chromium and COD in contaminated stormwater which may be discharged after the application of the appropriate BCT or BAT levels of treatment.

As authorized by 40 CFR Part 419.23(f) and 40 CFR Part 419.24(e), if contaminated stormwater is commingled or treated with process wastewater, the quantity of pollutants discharged shall not exceed the quantity determined by multiplying the flow of contaminated runoff times the Effluent Limitation Factors listed below.

i. CFmax (kg/m3):

BOD5 - 0.048
TSS - 0.033
Oil & Grease - 0.015
TOC - 0.106 (0.048 x 2.2)
Total Phenols - 0.00035
Total Chromium - 0.00060
Hexavalent Chromium - 0.000062

CFavg (kg/m3):

BOD5 - 0.026
TSS - 0.021
Oil & Grease - 0.008
TOC - 0.057 (0.026 x 2.2)
Total Phenols - 0.00017
Total Chromium - 0.00021
Hexavalent Chromium - 0.000028.

b. Stormwater credit is provided using the following equations to calculate the reported mass discharge rate for these pollutants:

$$Mc = Mm - (CF_{max})(SW)$$

$$Ar = Am - (CF_{avg})(SW_{avg})$$

where:

Mm = Measured maximum mass discharge rate (kg/day)

CFmax = Correction factor for maximum limit (kg/m3)

SW = Stormwater flow (m3/day) treated at the wastewater treatment plant on the day of sampling for parameters with stormwater credit.

Mc = Maximum mass discharge rate (kg/day) calculated using the equation above to provide credit for treated stormwater.

Am = Monthly average mass discharge rate (kg/day), computed as the sum of Mm values in the reporting period/number of days sampled for that specified monitoring period.

CFavg = Correction factor for monthly average limit

SWavg = Monthly average stormwater flow (m3/day) is the sum of stormwater values for days when treatment of contaminated stormwater coincides with sampling for the parameters with stormwater credit, divided by the number of such days.

Ar = Reported monthly average mass discharge rate (kg/day) calculated using the equation above to provide credit for treated stormwater.

Please note that, for the purposes of this calculation, the permittee must convert the stormwater flow from MGD to m3/day.

- c. The amount of stormwater flow (m³/day) routed through the treatment plant shall be reported on the DMR under the parameter "Flow" and the sample point "Precipitation". The associated stormwater loadings for the pollutants with stormwater credit shall be calculated using the procedure described in section G.2.a above and reported on the DMR under the sample point "Precipitation". Effluent loading values based on measured concentration shall be reported under the sample point "Effluent Gross Value". And, effluent compliance for these parameters shall be determined at the sample point "Effluent Net Value", which is Effluent Gross Value - Effluent Precipitation Value.

For monthly average calculations, the number of days in a month shall be the number of days sampled during the month, or for stormwater calculations, the number of days where sampling coincides with stormwater treatment (n), not the actual number of days in the month. Thus, for parameter specific monthly average stormwater calculations, the amount of stormwater treated on sampling days for that parameter shall be used to determine the total stormwater flow for the month, where zero shall be used when stormwater treatment does not coincide with a sampling day. The monthly average stormwater flow is a function of the total sampling day stormwater flow (sigma m³) divided by the number of days when sampling and stormwater treatment coincided (sigma m³/n).

HESS CORPORATION - PORT READING REFINERY, Woodbridge

Permit No.NJ0028878
DSW080001 Surface Water Renewal Permit Action